Abstract of the disclosure:

There is provided an ion exchange membrane and preparation process thereof. The membrane has a porous film layer having pores with an average pore diameter of 0.01 to 2 µm and a surface layer existent on at least one side of the porous film.

The pores of the porous film layer are filled with an ion exchange resin and the surface layer contains (a) an inorganic filler having an average primary particle longest diameter which is 0.1 time or more the average pore diameter of the pores of the porous film layer and 50 μ m or less and (b) an ion exchange resin. The membrane is useful for a diaphragm of a direct methanol type fuel cell.